FINDING OF EMERGENCY

The Secretary of the Department of Food and Agriculture finds that an emergency exists, and that the foregoing adoption of a regulation is necessary for an immediate action to avoid serious harm to the public peace, health, safety or general welfare, within the meaning of Government Code Section 11342.545 and Public Resources Code Section 21080.

Description of Specific Facts Which Constitute the Emergency

South American spongeplant (*Limnobium laevigatum*) was detected in a residential pond near the Sacramento River, in Redding, Shasta County. South American spongeplant is an aquatic noxious weed that has the potential, if allowed to spread downstream from this current infestation, to clog waterways, block water control structures, and supplant native plants, degrading the native ecosystem and negatively impacting the growth and reproduction of fish and wildlife resources. This incipient infestation, if not eradicated, would have served as a source to infest the most important waterways in the State, including the Central Valley Project, the State Water Project, the Sacramento River and the Sacramento-San Joaquin River Delta. This would have been detrimental to the State, and could have caused irreparable injury to the agricultural industry, environment and recreational use of streams, lakes, and waterways. As a result, the Department adopted Section 3963, South American Spongeplant Eradication Area, as an emergency action that was effective June 3, 2005.

South American spongeplant has been detected in the San Joaquin River as recently as November 19, 2007. The area of the San Joaquin River that is currently known to be infested, serves as the county boundary line between Fresno and Madera counties. An emergency response is necessary now to prevent this weed's continued escape and its ability to further establish a significant seed bank at this locality. A smaller seed bank reduces monitoring efforts and treatment costs.

The South American spongeplant may possess a similar potential for invasiveness as water hyacinth (*Eichhornia crassipes)*, which is among the world's worst aquatic weeds. South American spongeplant is capable of doubling its biomass in one week and can potentially overrun native ecosystems and water conveyance systems in the State. Its rapid proliferation leads to dense mats of plants that cover water bodies, reduce light and oxygen, and change the water's chemistry, fauna and flora. It forms large, free-floating, monospecific mats that compete with other aquatic species for light, nutrients and oxygen. Mats reduce dissolved oxygen levels and light and significantly alter invertebrate and vertebrate communities. As biomass from mats decomposes, organic input to sediments increases dramatically. Fish spawning areas may be reduced and critical waterfowl habitat may be degraded. It can reduce the recreational value for boating, fishing, swimming and create foul odors from its decay that creates anaerobic water conditions. Additionally, South American spongeplant poses a public health threat due to West Nile virus by making a potentially more desirable mosquito habitat. An emergency project to eradicate this incipient infestation now will protect the State's resources from degradation by the spread of this aquatic, noxious weed.

The Department has also consulted with the Shasta County Department of Agriculture, the California Agricultural Commissioners and Sealers Association; the Exotic and Invasive Weed Management Unit, Agricultural Research Services, United States Department of Agriculture; the Invasive Species Coordinator, Habitat Conservation Planning Branch, California Department of Fish and Game; and the California Invasive Plant Council and all see the need and are in support of the immediate eradication of South American spongeplant.

The spongeplants (genus *Limnobium*) are monocotyledonous floating or semi-terrestrial aquatic perennials of the waterweed family (Hydrocharitaceae). This family contains several other known serious invasive weed pests, most notably hydrilla (*Hydrilla verticillata*), but also egeria (*Egeria densa*) and elodea (*Elodea canadensis*).

South American spongeplant reproduces rapidly by both seed and stolons, quickly filling the available habitat with both clones and new individuals; it is often considered pestiferous even in its native range. South American spongeplant can be floating or rooted against shorelines; in either situation can produce mats of vegetation via stolons, which can grow across the water surface. Daughter plants are formed at the stolon nodes and can subsequently spread through fragmentation. In addition, South American spongeplant can also reproduce sexually and disseminate by seed. The one-millimeter long seeds are covered at maturity with small spinules and when shed are contained in a many-seeded gelatinous mass; both the gelatinous mass and individual seeds readily attach to watercraft, waterfowl, floating debris or other material. The seeds are shed above water, but germinate submerged and the seedlings float to the surface where they grow rapidly. The juvenile South American spongeplant can be recognized by the distinct spongy pad on the leaf undersurface, which serves as a float. When adult aerial leaves are formed the petiole becomes spongy and provides buoyancy. The ease of spread of South American spongeplant makes it critical that eradication measures be implemented as soon as possible to prevent spread.

The South American spongeplant does not have specialized over-wintering structures. Perenniality is achieved in non-tropical zones by the survival of fragments in sheltered locations, from where they can re-expand their population the following season.

The proposed amendment of Section 3963 would establish Fresno and Madera counties as additional eradication areas for South American spongeplant. The entire counties are being proposed as eradication areas since future detection surveys may result in finds of additional small South American spongeplant infestations outside the current known area. To enable rapid treatment of newly discovered small infestations without frequent amendment of the regulation, the entire counties should be established as an eradication area.

The effect of the amendment of this regulation will be to implement the State's authority to perform control and eradication activities against South American spongeplant in Fresno and Madera counties. Eradication actions undertaken by the Department will be in cooperation and coordination with federal, city, county, and other state agencies as deemed necessary by the Department to ensure no long-term significant environmental impacts. To prevent spread of the weed to non-infested areas to protect California's agricultural industry and environment, it is necessary to immediately begin treatment activities against the weed. Therefore, it is necessary to amend this regulation as an emergency action.

Authority and Reference Citations

Authority: Sections 407 and 5322, Food and Agricultural Code.

Reference: Sections 407, 5322, 5761, 5762 and 5763, Food and Agricultural Code.

Informative Digest

Existing law provides that the Secretary is obligated to investigate the existence of any pest that is not generally distributed within this state and determine the probability of its spread, and the feasibility of its control or eradication (FAC Section 5321).

Existing law also provides that the Secretary may establish, maintain, and enforce quarantine, eradication, and other such regulations as he deems necessary to protect the agricultural industry from the introduction and spread of pests (Food and Agricultural Code, Sections 401, 403, 407 and 5322). Existing law also provides that eradication regulations may proclaim any portion of the State as an eradication area and set forth the boundaries, the pest, its hosts, and the methods to be used to eradicate said pest (Food and Agricultural Code Section 5761).

Article 8. South American Spongeplant

Section 3963. South American Spongeplant Eradication Area.

The amendment of Section 3963 will establish that Fresno and Madera counties are additional eradication areas with respect to *Limnobium laevigatum*. The effect of the amendment of this regulation is to provide authority for the State to perform eradication activities against *Limnobium laevigatum* in Fresno and Madera counties.

Mandate on Local Agencies or School Districts

The Department of Food and Agriculture has determined that the proposed amendment of Section 3963 does not impose a mandate on local agencies or school districts and no reimbursement is required under Section 17561 of the Government Code.

Cost Estimate

The Department has also determined that the regulation will involve no additional costs or savings to any state agency because funds for state costs are already appropriated, no nondiscretionary costs or savings to local agencies or school districts, no reimbursable savings to local agencies or costs or savings to school districts under Section 17561 of the Government Code, funds for reimbursement for costs to local agencies have already been appropriated, and no costs or savings in federal funding to the State.